4-2-2016

Math Studies Prepared Gardner-Webb Grad to Explore Innovative Ideas

Office of University Communications

Math Studies Prepared Gardner-Webb Grad to Explore Innovative Ideas

webpublish.gardner-webb.edu/newscenter/math-studies-prepared-gardner-webb-grad-to-explore-innovative-ideas/

mtessnear April 2, 2016

Chinwendu Enyioha ('08) is Research Fellow at Harvard University

The research Chinwendu Enyioha ('08) conducts in the Department of Electrical Engineering at Harvard University in Cambridge, Mass., is based on mathematical theories and functions he studied at Gardner-Webb University. The GWU atmosphere allowed him to investigate topics suited to his interests, giving him a foundation to explore innovative ideas.

"The size of the math department and faculty-student ratio allowed me to harness the focused attention and mentorship that professors were willing to offer," he assessed. "The support from the math department faculty was excellent. Like most math undergraduate programs, students are trained how to think abstractly about everything, including concrete problems. My time at Gardner-Webb introduced me to the rudiments of a variety of mathematical tools, which were key in preparation for the challenges of graduate studies."

As a Harvard researcher, he studies methods for allocating limited resources to meet the demands of users. "Such problems show up in different contexts, including power systems and Cyber-Physical networks, where independent electric power operators must meet constantly changing power needs, while avoiding system overload and blackouts," he elaborated. "My research broadly applies some existing tools from mathematics and develops new theory to address such problems."

Since leaving Gardner-Webb, Enyioha has been a postdoctoral researcher in electrical and systems engineering at the University of Pennsylvania, where he also completed his Ph.D. He has also held visiting research positions at the University of Minnesota, California Institute of Technology, and the Corporate Research Division of Robert Bosch GmbH in Stuttgart, Germany, where he worked on projects ranging from understanding network topologies to reliability analysis in engineering systems.

"Some of my past work developed tools and techniques for contagion control in networks and studied the interplay between spreading dynamics and properties of networks, as they affect control of epidemic processes," Enyioha explained.

Because of his accomplishments, Enyioha received the Mathematical Association of America Southeastern Section Patterson Award and the GWU Scholastic Achievement

award. He is also a Fellow of the Ford Foundation and was named a Fontaine Scholar at the University of Pennsylvania.

“I look back with fondness at my time and experience in the Gardner-Webb Math Department,” Enyioha reflected. “Particularly memorable was the attentiveness of the math faculty to student learning needs, and the high quality and interest in teaching they exuded. Their support, in part, spurred me on to pursue my academic interests and current career in research.”